

CLAIMS

1. Hydrodynamic actuating device having one primary mover, one torque converter and one rear-mounted transmission, especially for construction machines of wide range of motion such as mobile cranes, there being coordinated with the torque converter one bridging clutch (WK) and one primary clutch (16) for limiting the maximum traction, characterized in that the primary clutch (16) and the converter bridging clutch (WK) are disposed in series so as to be switchable via a single valve controlled by the transmission control with only one control pressure so that in all driving situations first the primary clutch (16) and thereafter the converter bridging clutch (WK) are closed.

2. Hydrodynamic actuating device according to claim 1, characterized in that the switching in series of the primary clutch (16) and of the converter bridging clutch (WK) is produced by adequately dimensioning the piston recoil springs (12, 13) and/or by adequate design of the surfaces of the pistons (10,11).

3. Hydrodynamic actuating device according to claim 1 and 2, characterized in that the torque converter is connected with the rear-mounted transmission via one stator freewheel (7).

4. Hydrodynamic actuating device according to any one of the preceding claims, characterized in that both the primary clutch (16) and the converter bridging clutch (WK) are located in the interior of the rear-mounted transmission.

5. Hydrodynamic actuating device according to claim 4, characterized in that the primary clutch (16) and the converter bridging clutch (WK) are disposed in parallel.

6. Hydrodynamic actuating device according to claim 4, characterized in that the primary clutch (16) and the converter bridging clutch (WK) are disposed superposed.

7. Hydrodynamic actuating device according to any one of the preceding claims, characterized in that the inner discs of the primary clutch (16) are connected with the input shaft (1) and the outer discs of the primary clutch (16) are connected with the impeller (2) of the torque converter.

8. Hydrodynamic actuating device according to any one of the preceding claims, characterized in that the inner discs of the converter bridging clutch (WK) are connected with the turbine wheel (5) of the torque converter and the outer discs with the impeller (2) of the torque converter.